

PATENT

App. Ser. No.: 10/684,545
Atty. Dkt. No. ROC920030253US1
PS Ref. No.: IBMK30253

REMARKS

This is intended as a full and complete response to the Office Action dated October 17, 2005, having a shortened statutory period for response set to expire on January 17, 2006. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-39 are pending in the application. Claims 1-35 and 37-38 remain pending following entry of this response. Claims 1-3, 17, 33, 35, 37 and 38 have been amended. Claims 36 and 39 have been cancelled. Applicants submit that the amendments do not introduce new matter.

Claim Rejections - 35 U.S.C. § 112

Claims 1-8, 17-24, 33 are rejected under 35 U.S.C. 112, second paragraph. As per claims 1, 17, 33, the Examiner states that the preambles of the claims recite "a method of architecting a relationship between a physical representation of data in a database and a logical representation of the data" but that the claims are silent on the required steps to arrive with [sic] the method for architecting a relationship between a physical representation of data in a database and a logical representation of the data, thereby rendering the claim vague and indefinite. In fact, the Examiner mischaracterizes the preambles of the claims. Claim 33 recites only a "computer". Claims 1 and 17 recite "architecting a relationship between a first physical representation of data and a second physical representation of the data". Therefore, the rejection is defective on its face, since the language rejected by the Examiner is not found in the rejected claims.

Further, the respective bodies of claims 1 and 17 are clearly consistent with this preamble since the bodies recites mapping the first physical representation to a logical model abstractly describing the second physical representation. The mapping therefore relates the first and second physical representations of data, in that both are described by the logical model. Accordingly, Applicants respectfully request that the rejection be withdrawn.

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Claims 1 and 35 are rejected under 35 U.S.C. 112, first paragraph because, the Examiner argues, "they simply recite a single means that does not appear in combination with another recited element of means". Applicants respectfully traverse because claims 1 and 35 do not recite "means" of any kind. In any case (and not because of the present rejection), Applicants have amended the respective claims thereby rendering the rejection moot. Applicants, therefore respectfully request that the rejection be withdrawn.

Double Patenting

Claims 1-39 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-35 of copending Application No. 10/459,733. Claims 1-39 are also provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of copending Application No. 10/422,884.

Because both of the obvious-type double patenting rejections are provisional, Applicants will defer responding to the rejection on the merits until the rejections ripen into actual obvious-type double patenting rejections and the claims of the present application are otherwise in condition for allowance.

Claim Rejections - 35 U.S.C. § 102

Claims 1-39 stand rejected under 35 U.S.C. § 102(e) as being anticipated by *Blumenau et al.* (U.S. 2002/0002661 A1, hereinafter "*Blumenau*").

Applicants respectfully traverse this rejection.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9

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USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Applicants submit that *Blumenau* do not anticipate Applicants' original claims. Applicants further submit that the present rejection is defective, for reasons given below. Nevertheless, in an effort to move prosecution forward more expeditiously, Applicants have clarified selected pending claims with the amendments submitted herewith.

As an initial matter, Applicants respectfully note that the Examiner's rejection provides virtually no analysis regarding exactly how *Blumenau* is believed to anticipate the claims. In fact, the Examiner merely recites the preamble and a single element of Claim 1 and then recites language found in the abstract of *Blumenau* (in addition to referring to the title and the abstract, the Examiner also refers to Figures 2-10 and a corresponding text of *Blumenau*). (See, last partial paragraph of Examiner's Action at bottom of page 5 and continuing at top of page 6.) No analysis relating the language of claim 1 to the cited teachings of *Blumenau* is provided, and the first element of claim 1 ("providing a logical model abstractly describing the second physical representation") is not addressed at all.

Further, the Examiner provides no substantive rejection of any of the other independent claims, which on their face contain substantially different elements from claim 1. See, e.g., claim 9. This is *per se* defective since each independent claim must be separately rejected for what it recites. Further, the Examiner premises the rejection of the dependent claims on their dependency from their respective independent claims. This is *per se* defective, as it is well-established that dependent claims must be separately rejected under 35 USC § 102, 103 for what they recite in addition to their respective base claims and any intervening claims. The dependent claims cannot be rejected on the basis that their respective base claims or intervening claims are anticipated or obvious.

Therefore, Applicants respectfully submit that the present rejection is wholly defective and respectfully request a new office action properly and substantively addressing each claim, or an allowance of all claims.

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In addition to the deficiencies of the present rejection, Applicants further submit that *Blumenau* is not an anticipating reference with respect to the present claims (as well as the original claims). The present claims are directed to providing a logical model defining a logical representation of the data described by one physical representation of data, and then mapping the logical model to another physical representation of the data. In particular, the logical model defines logical fields that map to corresponding data fields of the physical data represented by the physical representations.

Blumenau is directed to improving data storage systems by, e.g., reducing the number of I/O operations required to perform a given task. See, e.g., paragraph 0021. The following excerpt of *Blumenau* is instructive:

As discussed below, data stored in the storage device 140 is typically organized in units termed "blocks", where each block includes a number of bytes of data (e.g., 512 bytes). Application programs executing on the host computer 110 typically operate on logical objects (e.g., files) that include a collection of one or more blocks of data that are logically related. The computer system 100 typically includes one or more mapping layers that map from the logical objects operated upon by the application programs to the particular physical locations in the storage system where the blocks that make up the logical object are stored. Often, the blocks of data that make up a particular logical object are mapped to non-contiguous physical locations in the storage system 140. In a typical computer system 100, the storage system has no understanding that a number of non-contiguous physical blocks are logically related. Thus, when the host computer 110 executes an operation on a logical object having a plurality of blocks of data stored in non-contiguous physical locations in the storage device 140, the non-contiguous blocks must be accessed in separate operations from the storage system 140, which can impact the performance of the computer system 100. *Blumenau*, paragraph 0004.

Thus, *Blumenau* deals with blocks of data, not individual data fields. Accordingly, *Blumenau* does not allow for field level querying. Thus, Applicants submit that *Blumenau* does not teach the present claims.

Therefore, the claims are believed to be allowable, and allowance of the claims is respectfully requested.

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Conclusion

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the office action. Therefore, Applicants believe that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted, and
S-signed pursuant to 37 CFR 1.4,

/Gero G. McClellan, Reg. No. 44,227/

Gero G. McClellan
Registration No. 44,227
PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant(s)